



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,278	0.5% ▼
Open Interest (OI)	1,79,25,900	0.8% ▲
Change in OI (abs)	1,79,25,900	1,33,425 ▲
Premium / Discount (Abs)	75	9 ▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	55,472	0.3% ▼
Open interest (OI)	23,26,240	3.0% ▼
Change in OI (abs)	23,26,240	71,260 ▼
Premium / Discount (Abs)	187	9 ▼
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	10.56	0.59 ▲
Nifty ATM IV (%)	9.33	1.4 ▲
Bank Nifty ATM IV (%)	10.31	1.4 ▲
PCR (Nifty)	0.72	0.22 ▼
PCR (Bank Nifty)	0.97	0.06 ▼

The FII Long Ratio in Index Futures **jump** to 13.3 %, **up** from 12.9 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MUTHOOTFIN	33,20,075	16.7%	3052.9	3.9%
BLUESTARCO	24,21,900	11.6%	1987.8	1.1%
CHOLAFIN	1,48,56,875	7.5%	1615.1	1.7%
HEROMOTOCO	69,87,600	4.8%	5410.5	0.2%
ADANIGREEN	1,97,35,200	4.1%	1156	11.7%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KFINTECH	28,27,350	41.1%	1087.3	-5.0%
RBLBANK	9,43,35,600	30.7%	270.35	-0.9%
MAZDOCK	37,84,375	13.3%	2977.7	-0.7%
PERSISTENT	30,53,300	11.3%	5286	-4.3%
PPLPHARMA	1,71,22,500	10.8%	202.86	-3.0%

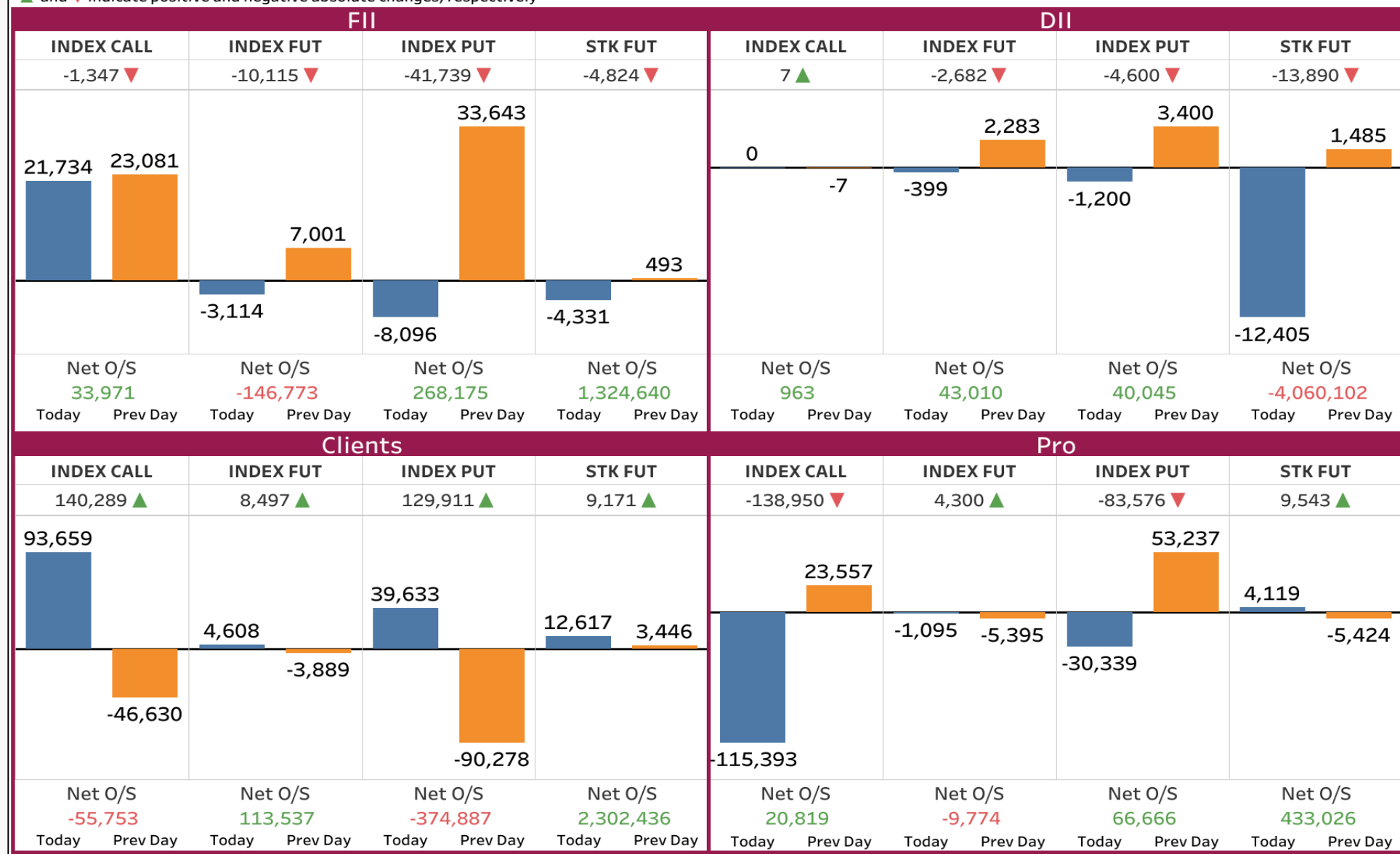
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HUDCO	2,87,87,850	-16.2%	240.7	5.0%
ADANIENT	1,53,72,900	-7.0%	2637.8	4.1%
BHEL	6,31,52,250	-2.8%	240.11	0.9%
UNITDSPR	1,27,58,400	-2.6%	1344.5	0.9%
PHOENIXLTD	45,48,950	-2.3%	1641.6	0.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DABUR	2,51,06,250	-5.9%	522.7	-2.6%
TATACHEM	52,07,800	-4.4%	975.75	-2.0%
SAMMAANCAP	9,38,90,500	-3.7%	141.36	-1.8%
SUNPHARMA	1,58,80,900	-3.3%	1644.8	-1.0%
CAMS	19,09,500	-3.2%	4021.7	-2.1%

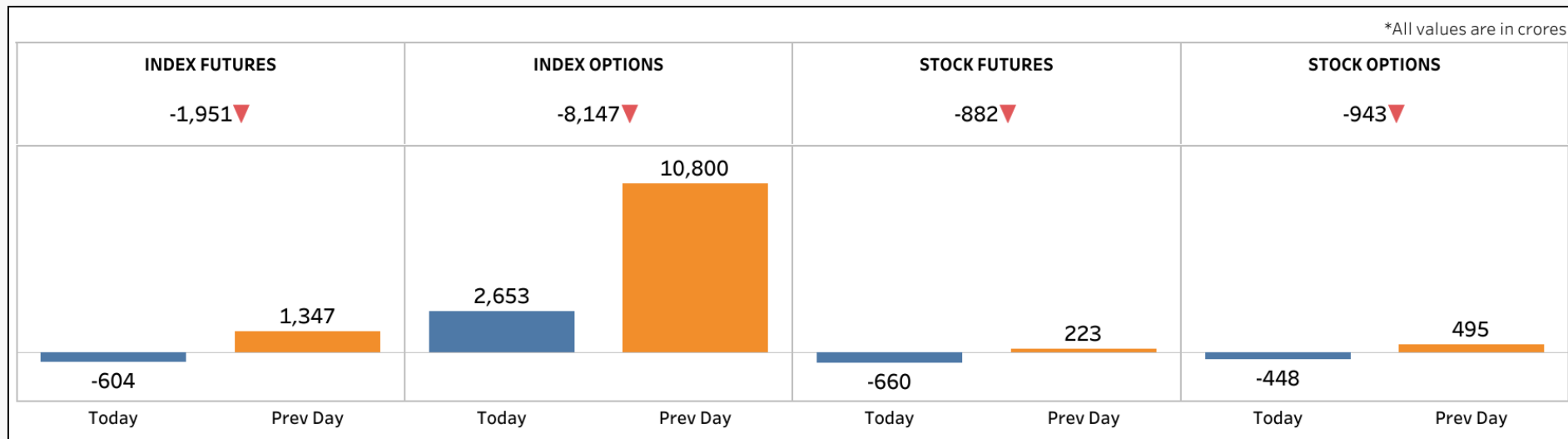
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

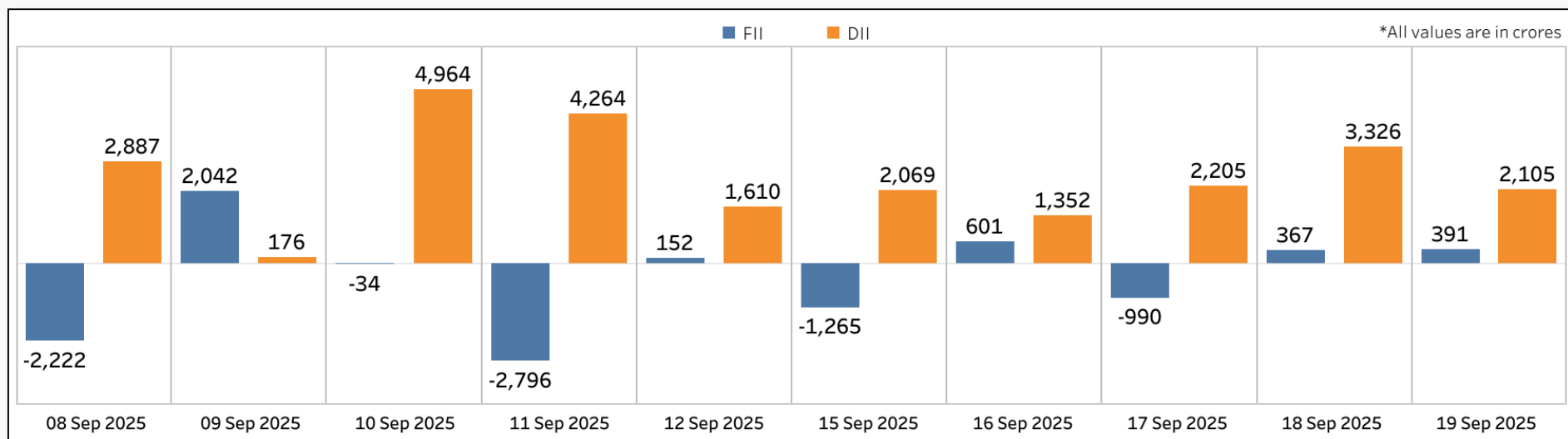
▲ and ▼ indicate positive and negative absolute changes, respectively



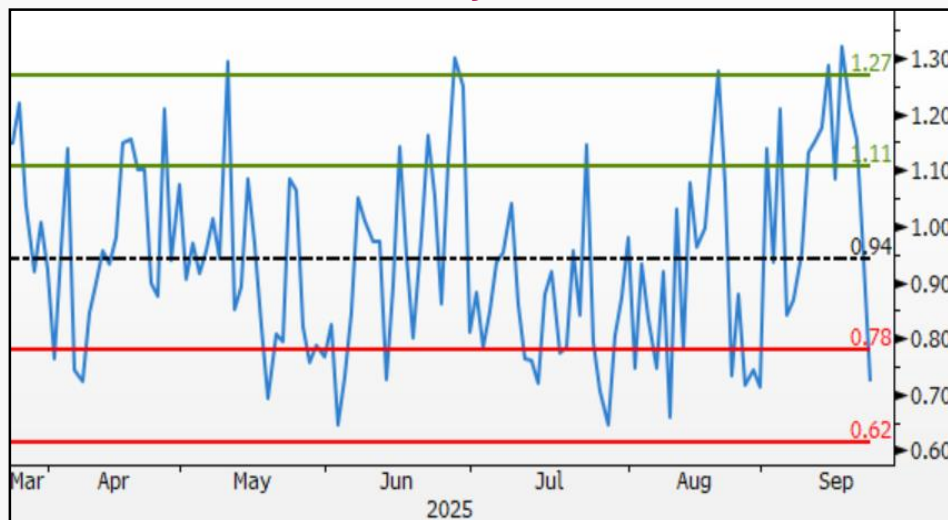
Daily Net Open Interest Change



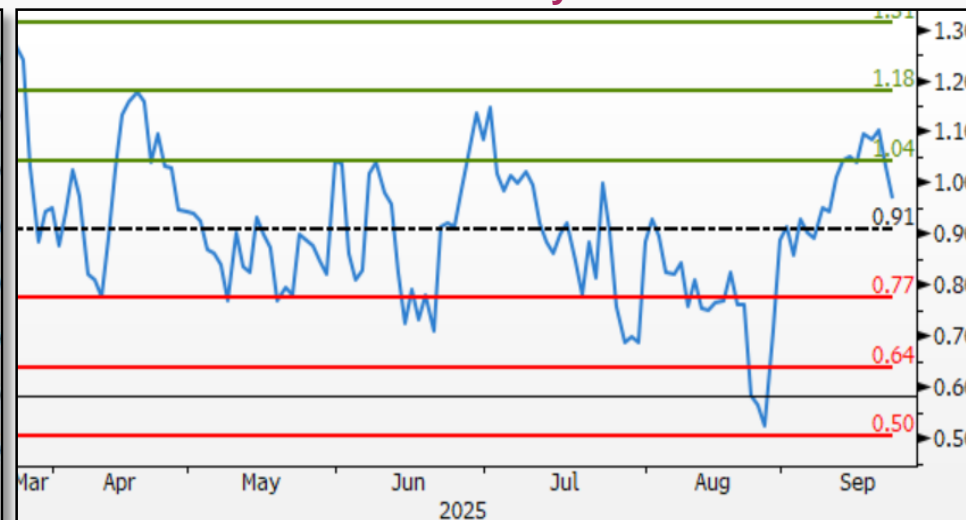
DII and FII Daily Cash Market Flows



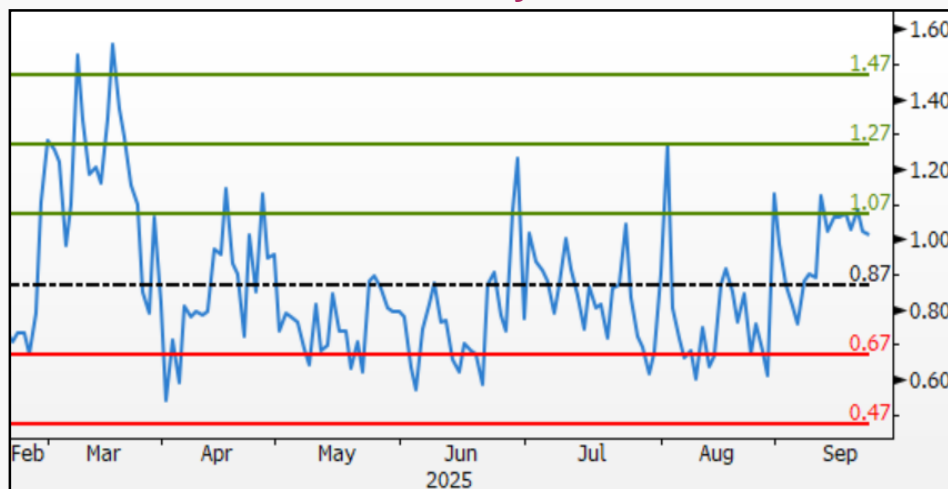
Nifty



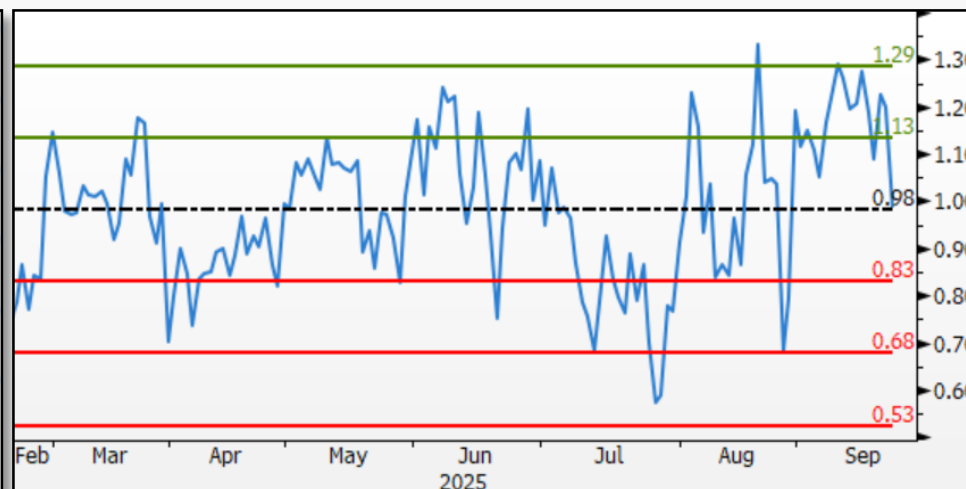
Bank Nifty



Fin Nifty

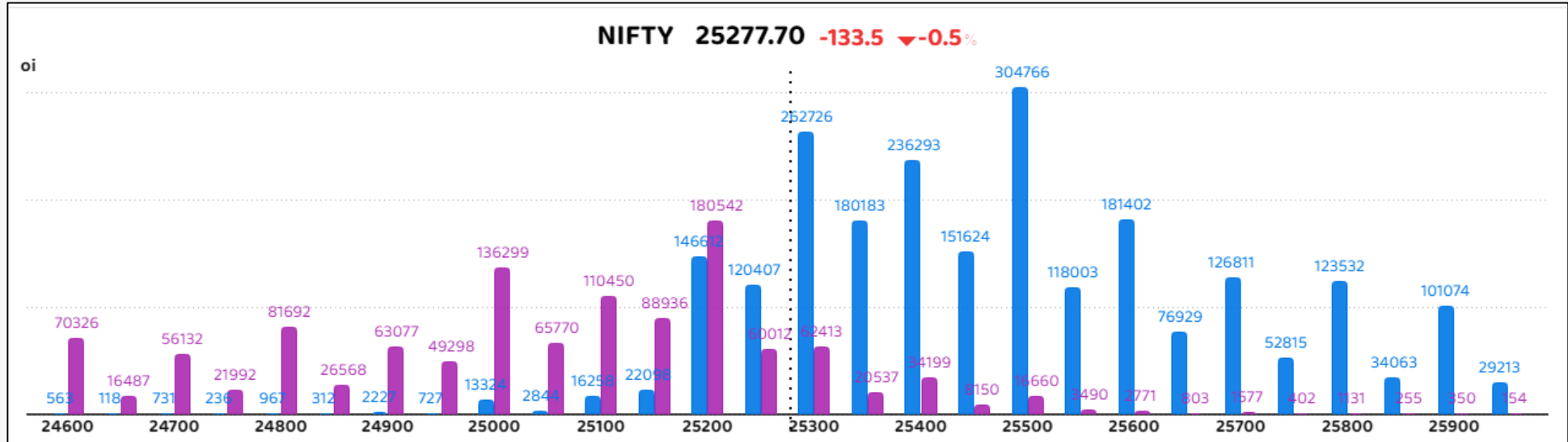


Midcap Select Nifty



Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call ■ Put ■



For the Nifty, the 25,500 Call and the 25,200 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 55,000 Put saw the most amount of open interest.

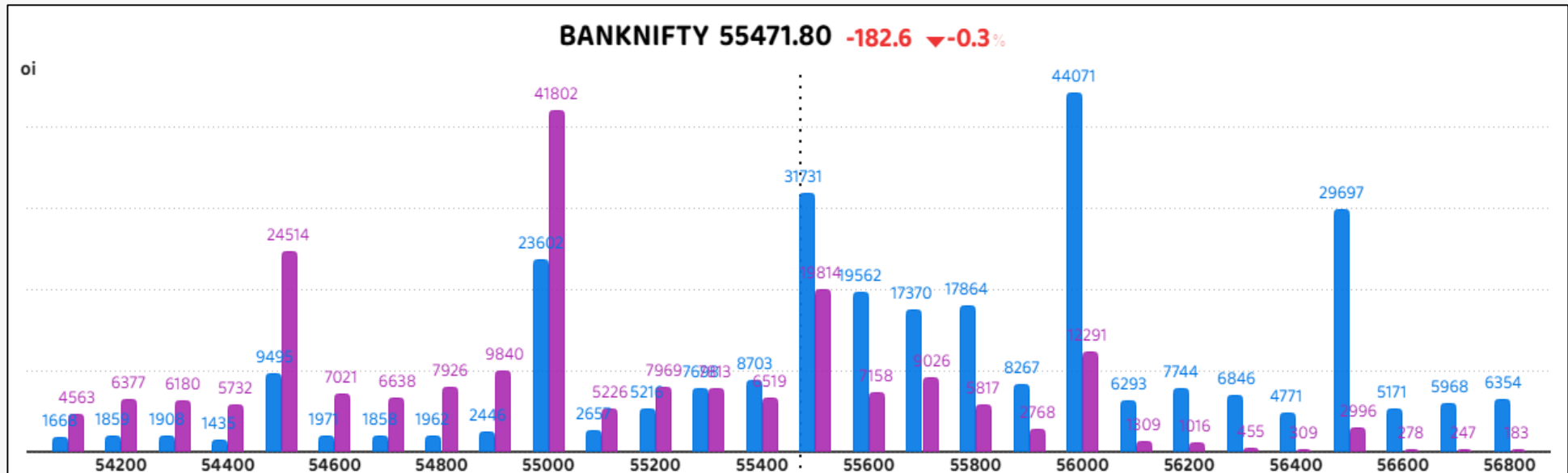
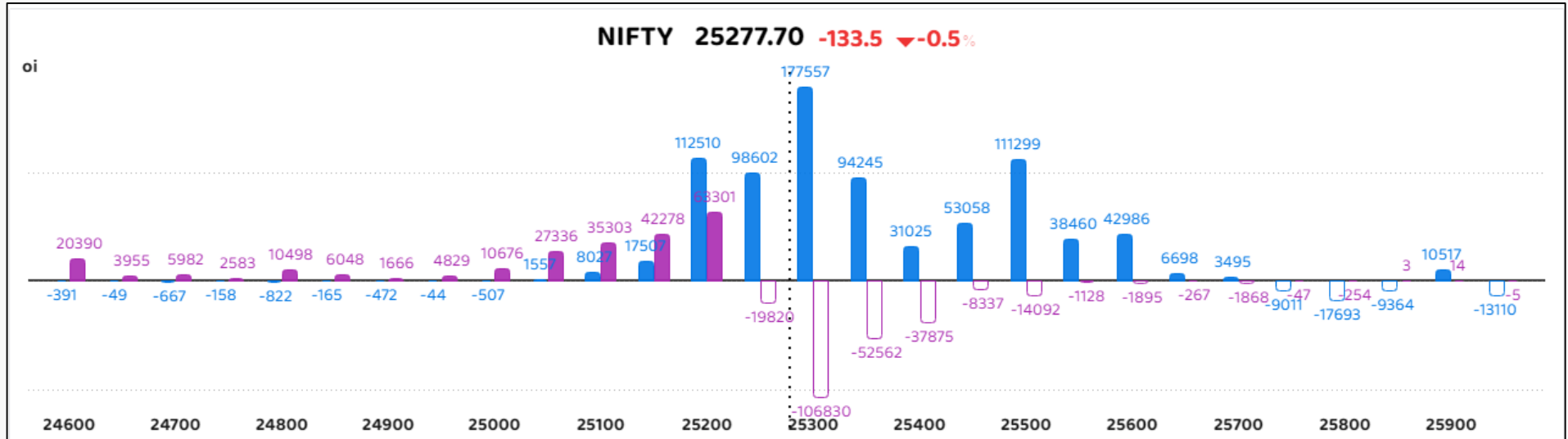


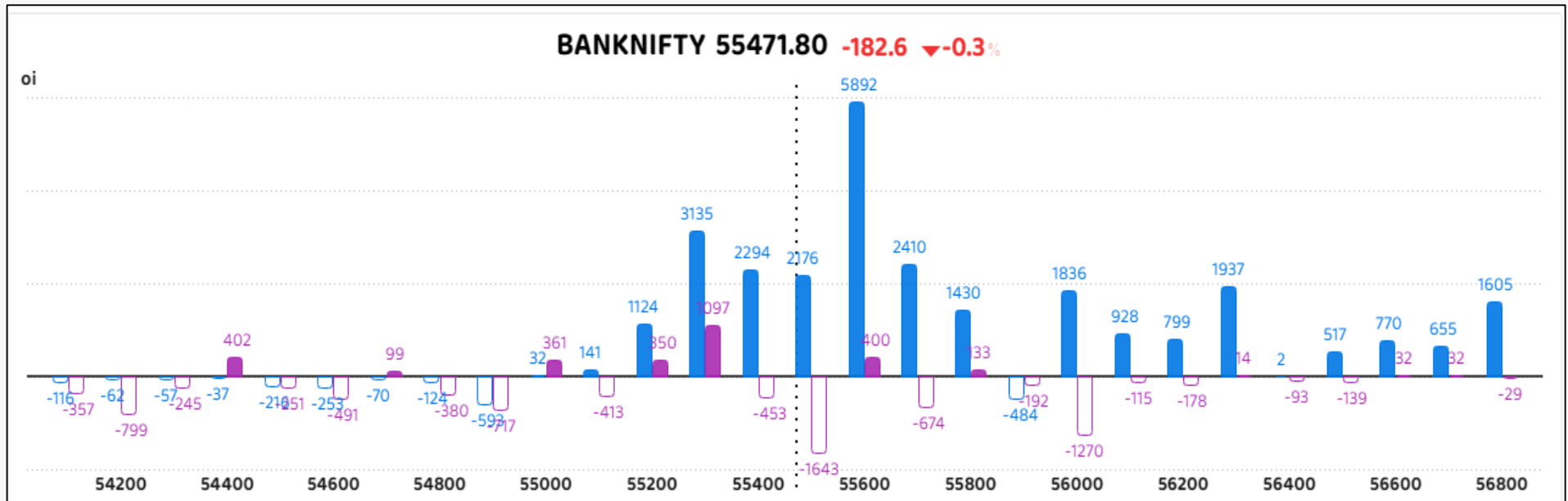
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,300 Call and the 25,300 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,600 Call & the 55,500 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TITAN CO LTD	3457.5	-0.3	39.3	39.3	2.3	100.0
PG ELECTROPLAST	561	-1.8	82.8	82.8	35.6	100.0
PIRAMAL PHARMA	202.71	-2.7	36.9	40.1	27.3	74.5
BOSCH LTD	39570	-0.6	26.3	36.2	2.1	70.9
BAJAJ AUTO LTD	9054.5	0.9	26.4	36.4	2.1	70.9

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
VODAFONE IDEA	8.39	-0.1	29.5	88.7	29.5	0.0
NTPC LTD	339.2	0.2	20.2	116.6	16.7	3.6
PUNJAB NATL BANK	113.04	-0.2	24.8	108.3	21.3	4.1
FED BANK LTD	195	-1.5	22.4	130.9	17.1	4.7
SUN PHARMA	1644	-0.7	15.5	31.7	14.6	5.3

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TITAN CO LTD	3457.5	-0.3	39.3	39.3	2.3	100.0
PG ELECTROPLAST	561	-1.8	82.8	82.8	35.6	100.0
HFCL LTD	74.85	-2.1	54.6	89.4	33.2	96.4
TATA ELXSI LTD	5607	-2.0	38.6	51.9	20.0	92.2
ICICI PRUDENTIAL	609.5	1.2	30.0	41.4	15.3	82.7

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
VODAFONE IDEA	8.39	-0.1	29.5	88.7	29.5	0.0
ADANI ENERGY	937.4	6.9	20.6	67.9	14.8	0.7
KOTAK MAHINDRA	2021.7	-0.5	16.1	32.4	13.7	2.5
SUN PHARMA	1644	-0.7	15.5	31.7	14.6	3.2
SBI CARDS & PAYMENTS	869.05	-0.3	19.7	36.9	4.6	3.4

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
VODAFONE IDEA	8.39	-0.1	23244	4398	5.3
APL APOLLO TUBES	1679.3	-0.7	5373	1049	5.1
TORRENT POWER	1268.6	0.3	8013	1591	5.0
BLUE STAR LTD	1996.8	1.7	8169	1752	4.7
KALYAN JEWELLERS	505.25	-1.2	15088	3257	4.6

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
KFIN TECHNOLOGIES	1093.9	-4.9	10269	10256	1.0
COMPUTER AGE	4014	-2.1	11005	10449	0.9
TATA CONSULTANCY	3073.8	-3.0	187160	172783	0.9
MPHASIS LTD	2852.4	-4.7	18751	16375	0.9
WIPRO LTD	250.33	-2.2	35637	29657	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
KAYNES TECHNOLOGY	7083.5	-1.0	12821	12821	100.0
PIRAMAL PHARMA	202.71	-2.7	5724	5724	100.0
KFIN TECHNOLOGIES	1093.9	-4.9	4173	4173	100.0
CG POWER	770.2	-1.2	13112	13563	96.7
TORRENT POWER	1268.6	0.3	4462	4628	96.4

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
ADANI GREEN ENERGY	1152.15	11.8	18649	18649	100.0
ADANI ENERGY	937.4	6.9	6736	6736	100.0
SONA BLW PRECISION	420.6	-3.6	5743	5743	100.0
AMBER ENTERPRISES	8310.5	0.3	6853	6853	100.0
KFIN TECHNOLOGIES	1093.9	-4.9	2943	2943	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ADANI GREEN ENERGY	1152.15	11.8	382990	382990	100.0
ADANI ENERGY	937.4	6.9	137279	137279	100.0
NBCC INDIA LTD	114.95	3.7	25578	25578	100.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
ADANI GREEN ENERGY	1152.15	11.8	135570	135570	100.0
ADANI ENERGY	937.4	6.9	30956	30956	100.0
NBCC INDIA LTD	114.95	3.7	9312	9312	100.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ADANI GREEN ENERGY	1152.15	11.8	22795	7262	3.1
MANKIND PHARMA	2594.9	-2.5	5502	1997	2.8
PAGE INDUSTRIES	43405	-0.4	11421	4241	2.7
ADANI ENERGY	937.4	6.9	11460	4454	2.6
PERSISTENT SYSTEMS	5271	-4.3	20451	8069	2.5

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ADANI GREEN ENERGY	1152.15	11.8	18649	5139	3.6
MANKIND PHARMA	2594.9	-2.5	2471	1032	2.4
ADANI ENERGY	937.4	6.9	6736	2923	2.3
KFIN TECHNOLOGIES	1093.9	-4.9	2943	1335	2.2
KPIT TECHNOLOGIES	1262.4	-1.8	5213	2511	2.1

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ADANI GREEN ENERGY	1152.15	11.8	382990	38721	9.9
ADANI ENERGY	937.4	6.9	137279	15254	9.0
ADANI ENTERPRISES	2629.5	4.2	446116	77317	5.8
HUDCO	239.96	4.8	43049	7691	5.6
NBCC INDIA LTD	114.95	3.7	25578	4625	5.5

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ADANI GREEN ENERGY	1152.15	11.8	135570	14553	9.3
ADANI ENERGY	937.4	6.9	30956	4761	6.5
KFIN TECHNOLOGIES	1093.9	-4.9	10256	1656	6.2
NBCC INDIA LTD	114.95	3.7	9312	1637	5.7
RBL BANK LTD	269.7	-0.5	9271	1647	5.6

Nifty 50 Constituents Open Interest (OI) Dashboard – Support / Resistance

Distance of Strike With Highest Open Interest From Current Market Price (%)

Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away	Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away
ADANIENT	2800	1390800	6.5%	2630	2600	1404000	-1.1%	ITC	420	8966400	3.2%	407	410	4192000	0.7%
ADANIPTS	1460	1883375	1.1%	1444	1400	1401725	-3.1%	JIOFIN	320	13806250	2.0%	314	310	4789300	-1.2%
APOLLOHOSP	7900	244375	2.1%	7739	7900	57250	2.1%	JSWSTEEL	1200	1134000	7.4%	1117	1000	547425	-10.5%
ASIANPAINT	2600	1465750	4.7%	2483	2500	501000	0.7%	KOTAKBANK	2000	1276400	-1.1%	2022	2000	934000	-1.1%
AXISBANK	1120	2444375	-2.1%	1144	1100	2031875	-3.9%	LT	3600	1251250	-1.2%	3645	3600	648025	-1.2%
BAJAJ-AUTO	9500	381675	4.9%	9055	9100	118350	0.5%	M&M	3700	1072200	3.2%	3585	3500	681600	-2.4%
BAJAJFINSV	2100	1314000	1.5%	2070	1900	650000	-8.2%	MARUTI	16000	543400	1.2%	15816	15000	512000	-5.2%
BAJFINANCE	1020	2157750	1.3%	1007	1000	1841250	-0.6%	NESTLEIND	1220	951500	2.7%	1188	1200	256000	1.0%
BEL	420	10260000	3.3%	406	400	5480550	-1.6%	NTPC	340	11931000	0.2%	339	330	2700000	-2.7%
BHARTIARTL	1960	2370250	0.2%	1956	1900	1257325	-2.9%	ONGC	240	18650250	1.1%	237	235	3780000	-1.0%
CIPLA	1600	1573125	3.7%	1542	1500	288000	-2.7%	POWERGRID	290	6638600	1.2%	287	280	2000700	-2.3%
COALINDIA	400	8124300	1.3%	395	390	2323350	-1.2%	RELIANCE	1500	7344500	7.9%	1391	1400	2807000	0.7%
DRREDDY	1300	4090625	-0.1%	1301	1300	1376250	-0.1%	SBILIFE	1880	612750	1.2%	1858	1840	222750	-1.0%
EICHERMOT	7000	342300	0.8%	6946	6500	311675	-6.4%	SBIN	860	8004000	0.6%	855	800	5412000	-6.5%
ETERNAL	340	7476275	-0.5%	342	330	6448075	-3.5%	SHRIRAMFIN	640	1198725	1.9%	628	620	894300	-1.3%
GRASIM	2900	406250	1.6%	2854	2800	162250	-1.9%	SUNPHARMA	1620	1374100	-1.5%	1644	1600	775600	-2.7%
HCLTECH	1500	1417150	4.2%	1440	1400	592200	-2.8%	TATACONSUM	1200	683100	6.2%	1130	970	399300	-14.2%
HDFCBANK	1000	10340000	3.7%	964	970	5209600	0.6%	TATAMOTORS	720	10768000	3.4%	696	700	3558400	0.5%
HDFCLIFE	800	2294600	1.5%	788	780	999900	-1.0%	TATASTEEL	175	17902500	2.1%	171	160	17479000	-6.6%
HEROMOTOCO	5500	689850	1.3%	5430	5400	199200	-0.5%	TCS	3200	2076900	4.1%	3074	3000	1032500	-2.4%
HINDALCO	760	2713200	1.9%	746	720	1292200	-3.4%	TECHM	1580	1548000	5.0%	1505	1480	1624200	-1.7%
HINDUNILVR	2700	1969800	5.0%	2572	2600	372000	1.1%	TITAN	3600	1150975	4.1%	3458	3600	302400	4.1%
ICICIBANK	1420	3940300	1.3%	1402	1400	2254000	-0.1%	TRENT	5300	1100700	5.8%	5011	5000	317400	-0.2%
INDUSINDBK	750	2467500	2.1%	734	740	1423100	0.8%	ULTRACEMCO	13000	163700	2.8%	12650	12500	46850	-1.2%
INFY	1600	5840000	6.7%	1500	1440	2735200	-4.0%	WIPRO	260	13530000	3.9%	250	250	5859000	-0.1%

If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green

If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike will be colored red

If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating existing positions**
- **Long build up:** Prices increase with a rise in open interest and is considered **bullish**
- **Long liquidation:** Existing longs liquidate their positions and open interest also falls; **moderately bearish**
- **Short build up:** Prices drop with a rise in open interest, and this is considered **bearish**
- **Short covering:** Existing shorts cover their positions, and open interest drop; this is **moderately bullish**
- PCR goes up when 1) both put and call open interest go up, but puts rise faster, or 2) both put and call open interest go down, but calls fall faster or, 3) when puts go up and calls go down
- Generally, a **rising PCR is bearish**, but when it reaches an extremely **high** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bullish**
- PCR goes down when 1) both put and call open interest go up, but calls rise faster, or 2) both put and call open interest go down, but puts fall faster or, 3) when puts go down and calls go up
- Typically, a **falling PCR is bullish**, but when it reaches an extremely **low** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bearish**

**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the open interest for the day is 20 contracts
- **Total open interest:** Total of all open positions for all available expirations. It is the sum of all outstanding long positions OR short positions. This is because the total number of long positions must equal the total number of short positions
- **Premium:** When the front-month futures are more expensive than the cash market price. For instance, if Nifty futures (first month contract) are at 25,500 when the cash Nifty is at 25,450, the premium is 50 points
- **Discount:** When the front-month futures are cheaper than the cash market price. For instance, if Tata Steel futures (first month contract) are at 160 when the stock is trading at 162 in the cash market, the discount is 2 points
- **At-the-Money (ATM):** When the strike price of an option is the same as the spot price, the option is called an ATM option
- **Implied Volatility (IV):** Measure of how much a stock is expected to move in the future (in either direction)
- **Put-Call Ratio (PCR):** Ratio of total number of outstanding puts to total number of calls outstanding. If this ratio is more (less) than one, it means more puts (calls) are open relative to calls (puts)
- **Derivatives market participants:** Foreign Institutional Investors (FIIs), Domestic Institutional Investors (DII), proprietary traders and Retail investors
- **Derivatives Instruments:** Index options, index futures, stock options, stock futures
- **Expirations covered:** Index options (weekly, monthly), stock options, stock futures and index futures (monthly)
- For pages 7 to 11, “Last px” refers to the closing price of the cash market ticker
- **Source(s):** www.nseindia.com, Bloomberg, MyFnO

- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions is considered as support
- **Shifting concentration:** Strikes with highest call and put concentration are dynamic in nature and keep changing as per movements in the markets
- **Implied Volatility Rank (IVR):** Measure of how expensive or cheap the IV of an ATM option is, relative to its 12-month history. The reading oscillates between 0 and 100



Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

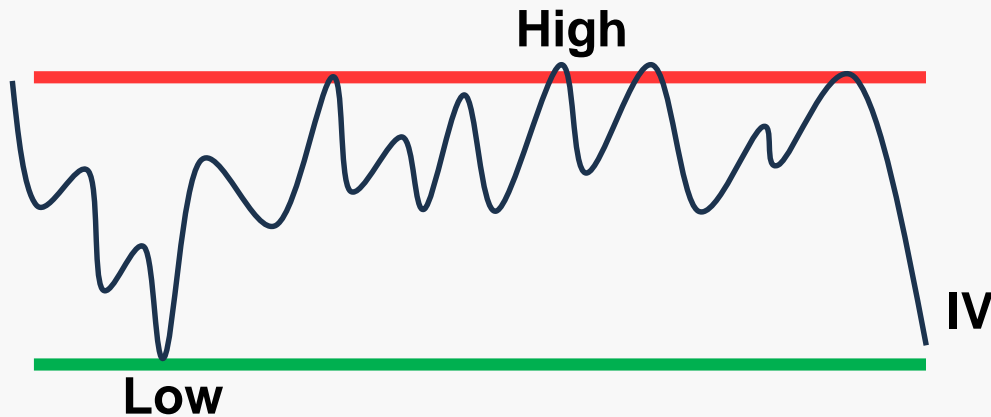


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **Implied Volatility Percentile (IVP):** Measures the number of days IV has been below the current IV in the last 252 trading days. The reading moves between 0 and 100.



In the chart to the left, one can see that the bulk of the time the IV has been below its current level. In this case, the IVP will be close to 100. An IVP of 100 means that 100% of the time IV has been below its current reading in the last one year.



Notice that IV has mostly traded at the high end of its one-year range, and there have been very few values below the current IV. In such a scenario, the IVP is going to be close to 0. An IVP of say, 5, means that IV has been below the current IV only 5% of the time in the last 252 trading sessions.

Axis Securities Limited is a subsidiary company of Axis Bank Ltd. Axis Bank Ltd. is a listed public company and one of India's largest private sector banks and has its various subsidiaries engaged in businesses of Asset management, NBFC, Merchant Banking, Trusteeship, Venture Capital, Stock Broking, the details in respect of which are available on www.axisbank.com.

Axis Securities Limited, is registered as a Stock Broker, Depository Participant, Portfolio Manager, Investment Adviser and Research Analyst with Securities and Exchange Board of India Corporate Agent with Insurance Regulatory and Development Authority of India Point of Presence with Pension Fund Regulatory and Development Authority Distributor for Mutual Funds with AMFI

Registration Details:

SEBI Single Reg. No.- NSE, BSE,MSEI, MCX & NCDEX – INZ000161633 | SEBI Depository Participant Reg. No. IN-DP-403-2019 | Portfolio Manager Reg. No.- INP000000654 | Investment Advisor Reg No. INA000000615 | SEBI-Research Analyst Reg. No. INH000000297 | IRDA Corporate Agent (Composite) Reg. No. CA0073| PFRDA – POP Reg. No. POP387122023 | Mutual Fund Distributor ARN- 64610.

Compliance Officer Details: Name – **Mr. Rajiv Kejriwal**, Tel No. – 022-68555574, Email id – compliance.officer@axisdirect.in;

Registered Office Address – Axis Securities Limited, Unit No.002, Building- A, Agastya Corporate Park, Piramal Realty, Kamani Junction, Kurla (W), Mumbai – 400070.

Administrative office address: Aurum Q Parc, Q2 Building, Unit No. 1001, 10th Floor, Level – 6, Plot No. 4/1 TTC, Thane – Belapur Road, Ghansoli, Navi Mumbai, Pin Code – 400710.

In case of any grievances please call us at 022-40508080 or write to us helpdesk@axisdirect.in.

We hereby declare that our activities were neither suspended nor we have defaulted with any stock exchange authority with whom we are registered in last five years. However, SEBI, Exchanges, Clearing Corporations and Depositories etc. have conducted the routine inspection and based on their observations have issued advise/warning/show cause notices/deficiency letters/ or levied penalty or imposed charges for certain deviations observed in inspections or in normal course of business, as a Stock Broker / Depository Participant/Portfolio Manager. We have not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has our certificate of registration been cancelled by SEBI at any point of time.

Investments in securities market are subject to market risks. Read all the related documents carefully before investing.

By referring to any particular sector, Axis Securities does not provide any promise or assurance of favourable view for a particular industry or sector or business group in any manner.

Registration granted by SEBI, membership of BASL (in case of IAs) and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. None of the research recommendations promise or guarantee any assured, minimum or risk-free return to the investors. Our research should not be considered as an advertisement or advice, professional or otherwise. This research report and its respective content by Axis Securities made available on this page or otherwise do not constitute an offer to sell or purchase or subscribe for any securities or solicitation of any investments or investment services for the residents of Canada and / or USA or any jurisdiction where such an offer or solicitation would be illegal.

Subject company(ies) may have been client during twelve months preceding the date of distribution of the research report. Derivatives are a sophisticated investment device. The investor is requested to take into consideration all the risk factors before actually trading in derivative contracts.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment of its original date of publication by ASL and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments.

The information and opinions in this report have been prepared by Axis Securities and are subject to change without any notice. The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of Axis Securities. The report must not be used as a singular basis of any investment decision. The views herein are of a general nature and do not consider the risk appetite, investment objective or the particular circumstances of an individual investor. The investor is requested to take into consideration all the risk factors including their financial condition, suitability to risk return profile and the like and take professional advice before investing.

While we would endeavour to update the information herein on a reasonable basis, Axis Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent Axis Securities from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or Axis Securities policies, in circumstances where Axis Securities might be acting in an advisory capacity to this company, or in certain other circumstances.

Disclaimer & Disclosures :

This report is based on information obtained in good faith from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This report and information herein is solely for informational purpose and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. Axis Securities will not treat recipients as customers by virtue of their receiving this report. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. Axis Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice. Axis Securities or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months. Axis Securities or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction. Axis Securities or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the companies mentioned in the report in the past twelve months. Axis Securities encourages independence in research report preparation and strives to minimize conflict in preparation of research report. Axis Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither Axis Securities nor Research Analysts and / or their relatives have any material conflict of interest at the time of publication of this report. Please note that Axis Securities has a proprietary trading desk. This desk maintains an arm's length distance with the Research team and all its activities are segregated from Research activities. The proprietary desk operates independently, potentially leading to investment decisions that may deviate from research views.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

Research Analyst may have served as an officer, director or employee of subject company(ies). Axis Securities or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report. Since associates of Axis Securities and Axis Securities as an entity are engaged in various financial service businesses, they might have financial interests or actual/beneficial ownership of one percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report. Axis Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report. Certain transactions -including those involving futures, options and other derivatives as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. Reports based on technical analysis centres on studying charts of a stock's price movement and trading volume, as opposed to focusing on a company's fundamentals and as such, may not match with a report on a company's fundamentals.

We and our affiliates/associates, officers, directors, and employees, Research Analyst(including relatives) worldwide may: (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company/company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) or have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of Research Report or at the time of public appearance. Axis Securities may have proprietary long/short position in the above mentioned scrip(s) and therefore may be considered as interested. This should not be construed as invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independent of the PCG research and accordingly PMS may have positions contrary to the PCG research recommendation.

Disclaimer & Disclosures:

Axis Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither Axis Securities nor Research Analysts and / or their relatives have any material conflict of interest at the time of publication of this report. Please note that Axis Securities has a proprietary trading desk. This desk maintains an arm's length distance with the Research team and all its activities are segregated from Research activities. The proprietary desk operates independently, potentially leading to investment decisions that may deviate from research views.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

Research Analyst may have served as an officer, director or employee of subject company(ies). Axis Securities or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report. Since associates of Axis Securities and Axis Securities as an entity are engaged in various financial service businesses, they might have financial interests or actual/beneficial ownership of one percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report. Axis Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report. Certain transactions -including those involving futures, options and other derivatives as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. Reports based on technical analysis centres on studying charts of a stock's price movement and trading volume, as opposed to focusing on a company's fundamentals and as such, may not match with a report on a company's fundamentals.

We and our affiliates/associates, officers, directors, and employees, Research Analyst(including relatives) worldwide may: (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company/company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) or have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of Research Report or at the time of public appearance. Axis Securities may have proprietary long/short position in the above mentioned scrip(s) and therefore may be considered as interested. This should not be construed as invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independent of the PCG research and accordingly PMS may have positions contrary to the PCG research recommendation.

Sr. No	Name	Designation	E-mail
1	Rajesh Palviya	SVP Research (Head Technical & Derivatives)	rajesh.palviya@axissecurities.in
2	Hemang Gor	Derivative Analyst	hemang.gor@axissecurities.in
3	Rahil Vora	Derivative Analyst	rahil.vora@axissecurities.in